

STANDARDIZING NURSING ASSESSMENTS OF DERMATOME LEVELS OF POSTOPERATIVE PATIENTS WITH SPINAL BLOCKS, EPIDURAL ANALGESIA

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BACKGROUND INFORMATION:

Patients who have spinal blocks for anesthesia or have surgery to set up epidural analgesia for pain management, must be assessed postoperatively for level of spinal analgesia post-surgery, where the expectation is the dermatome level will recede over time. Epidural analgesia levels must be assessed for the expectation of sufficient coverage of dermatome levels to control postoperative pain.

Based on observational data in the post-anesthesia care unit of Northwestern Memorial Hospital, inconsistency in assessment methods, frequency of assessments, dermatome level documentation in postoperative patients who have received spinal blocks or epidural analgesia was identified.

OBJECTIVES OF PROJECT:

The purpose of this evidence-based quality improvement project is to standardize dermatome assessments, interventions and documentation done by PACU registered nurses with postoperative patients who have spinal anesthesia or epidural analgesia.

PROCESS OF IMPLEMENTATION:

This is a translational research, evidence-based quality improvement project. Best evidence-based postoperative dermatome assessment practices were found in extant literature, analyzed and used to develop an evidence-based postoperative dermatome decision tree protocol to assist nurses with the process of dermatome assessments, frequency and interventions for complications, insufficient pain control and requirements for documentation.

All PACU registered nurses will be educated regarding dermatome assessment and use of the Dermatome Decision Tree Protocol, including use of ice as the assessment tool. Classes will be offered on all three shifts over a two week period, with the initial class taking 30 minutes. In the initial class, nurses will take a pretest and receive instruction on the new protocol.

Pretesting, educational sessions, post-testing and inter-rater reliability will be assessed by the PACU Education Coordinator. In addition, PACU documentation by registered nurses in the EMR will be queried for dermatome assessments in the patient population 18 years of age and older who have received spinal anesthesia and/or epidural catheter analgesia.

STATEMENT OF SUCCESSFUL PRACTICE:

This project is part of NMH's quality initiative implementing best practices for better patient outcomes.

IMPLICATIONS FOR ADVANCING THE PRACTICE OF PERIANESTHESIA NURSING:

Accurate dermatome assessments by PACU registered nurses is critical with this patient population because complications and pain control need to be closely monitored. Future research should continue to explore improvements in methodology, accuracy of assessments and improvements in interventions in this patient population.